SPECIFICATION

Customer : SOLOMON

Applied To :

Product Name : MIC

Model Name : KPCM-45H22P-38dB

Drawing No. : KF3.002.080

Signature of Approval

Signature of KEPO

Approved by	Checked by	Issued by	Date

ISO9001 Certificate

Ningbo Kepo Electronics Co.,Ltd.

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CONTENTS

1. Scope

This specification is applied to the MIC which is used all of the electrical acoustic product.

-- applications: mobile phone, PDA, notebook computer, etc. ..

2. General

2.1 Out-Diameter : Ø4.5mm
2.2 Height : 2.2mm
2.3 Weight : 0.1 gr.
2.4 Operating Temperature range:
-10~+45℃ without loss of function
2.5 Store Temperature range:
-20~+60℃ without loss of function

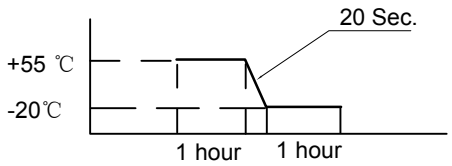
3. Electrical Characteristics.

Test condition : 15 ~ 35 ℃, 25% ~ 85% RH, 860~1060 mbar

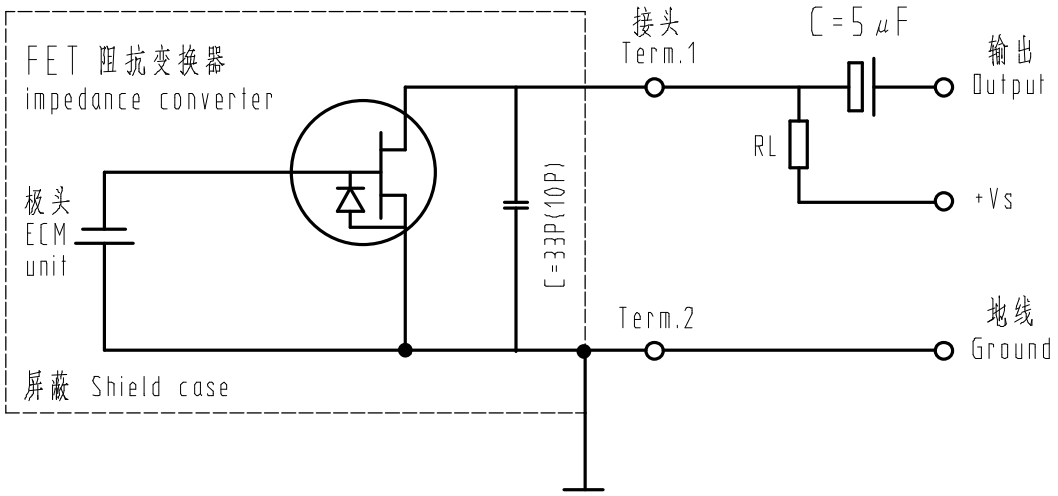
NO.	Items	Specifications
1	Rated Voltage	3.0V
2	Operating Voltage	1.5V~10V
3	Sensitivity	-38± 2dB at 1KHz(0dB=1V/Pa)
4	Current Consumption	0.5mA Max
5	Frequency	100~16,000Hz
6	S/N Ratio	≥60dB
7	Sensitivity Reduction	within-3dB at 1.5V
8	Directivity	Omnidirectional
9	Testing Condition	1000Hz, Vs=2.0V, RL=2.2K Ω
10	Shell Material/Color	AL/Silver
Note:		

4. Reliability Test

After test(1~7item), the MIC sensitivity to be within +/-3dB from initial sensitivity.

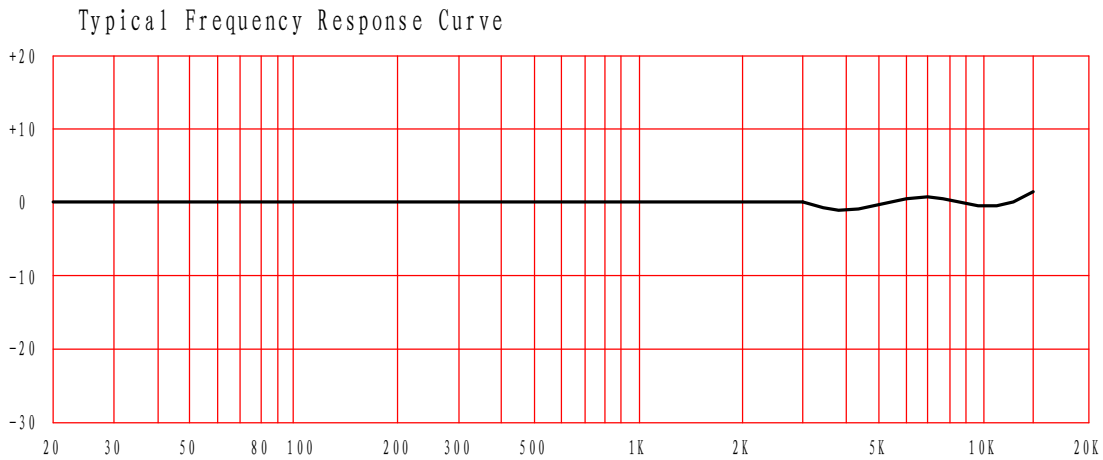
	Item	Specification
1	High Temperature Test	After being placed in a chamber with +70± 3 ℃ for 48hours and then being placed in natural condition for 1 hour
2	Low Temperature Test	After being placed in a chamber with -20± 3 ℃ for 48 hours and then being placed in natural condition for 1 hour
3	Humidity Test	To be no interference in operation after storage test at temperature 60+/-2℃ and relative humidity (93 ±3%) for 48 hours. the sensitivity to be within +/-3dB from initial sensitivity. the test is performed at temperature 20 ℃ after operation for 6 hours.
4	Thermal Shock Test	After being placed in a chamber at +55 ℃ for 1 hour, then receiver shall be placed in a chamber at -20 ℃ for 1 hour(1 cycle is the below diagram). After 5above cycles, receiver shall be measured after being placed in natural condition for 1 hour. 
5	Vibration Test	To be no interference in operation after vibration of full amplitude 2mm for 30minutes at five axis
6	Drop Test	To be no interference in operation after dropped to concrete floor each time from 1 meter height of five directions in state of packing
7	Collision Test	After collided with the acceleration 100+/-10m/s, at the vertical & horizontal directions for 1000+/-10 times, at the state of packing. Change of sensitivity within +/-3dB from initial.
8		

5.**Measurement Circuit** (Test Condition VS=2.0V RI=2.2K Ω Ta=20℃ R.H=65%)

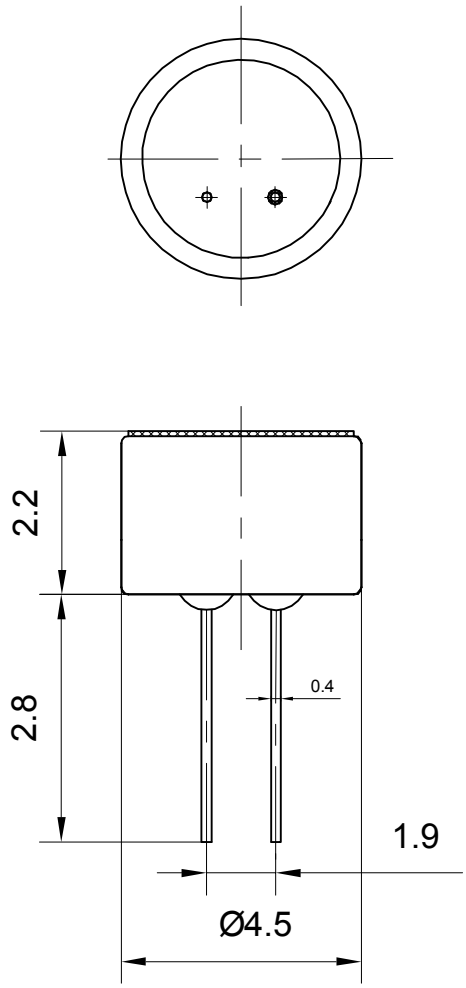


Typical Frequency Response CU+rve

Frequency Response



7. Dimensions



FIRST ANGLE PROJECTION

Term.1

C

UNIT : mm

Tolerance : ± 0.2